

## ATTACHMENT D

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AB OBJECTIVE: The effects of perilla seed oil (n-3 fatty acids) on bronchial asthma were compared with the effects of corn oil (n-6 fatty acids) in relation to the pulmonary function and the generation of leukotriene B4 (LTB4) and C4 (LTC4) by leucocytes. METHODS AND SUBJECTS: 14 asthmatic subjects were divided randomly into two groups: one group (7 subjects) consumed perilla seed oil-rich supplementation and the other group (7 subjects) consumed corn oil-rich supplementation for 4 weeks. Generation of LTs by leucocytes and respiratory function were compared between the two groups. RESULTS: The generation of LTB4 and LTC4 by leucocytes tended to increase in subjects (N=7) with corn oil-rich supplementation, and decrease in subjects (N=7) with perilla seed oil-rich supplementation. Significant differences between the two groups were observed in the generation of LTB4 at 2 weeks ( $p<0.05$ ) and LTC4 at 2 weeks ( $p<0.05$ ) after dietary supplementation. Significant increases in the value of PEF ( $p<0.05$ ), FVC ( $p<0.01$ ), FEV(1.0) ( $p<0.05$ ) and V(25) ( $p<0.05$ ) were found in subjects who received perilla seed oil supplementation for 4 weeks. And significant differences in the value of FVC ( $p<0.05$ ) and FEV(1.0) ( $p<0.05$ ) were observed between the two groups after 4 weeks of dietary supplementation. CONCLUSION: These results suggest that perilla seed oil-rich supplementation is useful for the treatment of asthma in terms of suppression of LTB4 and LTC4 generation by leucocytes, and improvement of pulmonary function.